

IN THE CLAIMS:

Claims 1-20 have been amended herein. All of the pending claims 1 through 20 are presented below. This listing of claims will replace all prior versions and listings in the application. Please enter these claims as amended.

1. (Currently Amended) ~~In a~~^A wire bonding apparatus for bonding a wire to a bond pad located on a ~~semic~~^{semi}conductor chip and a lead finger of a lead frame of a plurality of lead frames being supplied to ~~said~~ ~~wire~~ ~~the~~ wire bonding apparatus in a strip form, ~~said~~ ~~the~~ apparatus comprising:

a wire bonding apparatus having a portion thereof for dispensing ~~of~~ ~~said~~ ~~the~~ wire to be bonded to ~~said~~ ~~the~~ bond pad and ~~said~~ ~~the~~ lead finger and bonding ~~said~~ ~~the~~ wire to ~~said~~ ~~the~~ bond pad or ~~said~~ ~~the~~ lead finger;

an independent clamp for engaging ~~another~~ a portion of ~~said~~ ~~the~~ lead finger before ~~said~~ bonding of ~~said~~ ~~the~~ wire thereto, ~~said~~ ~~the~~ independent clamp being independently movable in relation to movement of another portion of ~~said~~ ~~the~~ wire bonding apparatus and ~~said~~ ~~the~~ lead finger of ~~said~~ ~~the~~ lead frame for engaging a portion of ~~said~~ ~~the~~ lead finger; and

a conventional fixed clamp for engaging ~~another~~ portion of ~~said~~ ~~the~~ lead finger adjacent ~~said~~ ~~the~~ independent clamp.

2. (Currently Amended) The apparatus of claim 1, wherein ~~said~~ ~~the~~ independent clamp is located between ~~said~~ ~~the~~ wire bonding apparatus and ~~said~~ ~~the~~ conventional fixed clamp ~~for~~ ~~engaging~~ ~~said~~ ~~the~~ portion of ~~said~~ ~~the~~ lead finger during ~~said~~ bonding of ~~said~~ ~~the~~ wire thereto.

3. (Currently Amended) The apparatus of claim 1, wherein ~~said~~ ~~the~~ independent clamp includes having an ability to move independently in an x-axis direction, y-axis direction and z-axis direction.

4. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp is movable independently in any direction of a movement of-said the wire bonding apparatus.

5. (Currently Amended) The apparatus of claim 1, wherein-said the apparatus further comprises:
heating apparatus located beneath-said the semiconductor chip.

6. (Currently Amended) The apparatus of claim 1, wherein-said the apparatus further comprises:
heating apparatus located beneath-said the lead finger.

7. (Currently Amended) The apparatus of claim 6, wherein-said the semiconductor chip is heated before-said the wire is bonded thereto.

8. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp is resiliently mounted.

9. (Currently Amended) The apparatus of claim 8, wherein-said the independent clamp is resiliently mounted through use of a spring engaging a portion of-said the independent clamp.

10. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp has an end portion thereof which is insulated.

11. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp has an end portion thereof which is semicircular in shape.

12. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp has an end portion thereof which is arcuate in shape.

13. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp has an end portion thereof which is articulated for movement.

14. (Currently Amended) The apparatus of claim 1, wherein-said the independent clamp is located between-said the wire bonding apparatus and-said the conventional fixed clamp engaging-said the portion of-said the lead finger during-said bonding of-said the wire thereto.

15. (Currently Amended) A wire bonding apparatus for bonding a wire to a bond pad located on a semiconductor chip and a lead finger of a lead frame of a plurality of lead frames supplied to-said the wire bonding apparatus in a strip form, said the apparatus comprising: wire bonding apparatus having a portion thereof for dispensing-of said the wire to be bonded to said the bond pad and-said the lead finger and bonding-said the wire to-said the bond pad or-said the lead finger;
a conventional fixed clamp for engaging a portion of-said the lead finger; and
an independent clamp for engaging another portion of-said the lead finger before-said bonding of said the wire thereto, said the independent clamp having an ability to move as desired in an x-axis ~~direction~~ direction, a y-axis direction, and a z-axis direction concurrently regarding a portion of-said the lead finger and being independently movable in relation to movement of another portion of-said the wire bonding apparatus.

16. (Currently Amended) The apparatus of claim 15, wherein-said the independent clamp is movable independent of a movement of-said the wire bonding apparatus.

17. (Currently Amended) The apparatus of claim 15, wherein ~~said~~ the apparatus further comprises:
heating apparatus located beneath ~~said~~ the semiconductor chip.

18. (Currently Amended) The apparatus of claim 17, wherein ~~said~~ the apparatus further comprises:
heating apparatus located beneath ~~said~~ the lead finger.

19. (Currently Amended) The apparatus of claim 17, wherein ~~said~~ the semiconductor chip is heated before ~~said~~ the wire is bonded thereto.

20. (Currently Amended) The apparatus of claim 15, wherein ~~said~~ the independent clamp is resiliently mounted.